

REMARKS/ARGUMENTS

In the Office Action claim 1 was objected to in view of an informality on line 12 of this claim. Claim 1 has been amended to change "displace" to "displaced" as this was the informality indicated by the Examiner. In view of the amendment to claim 1 it is submitted that the informality has been corrected and the Examiner is requested to withdraw this basis of objection for the claim.

Claims 5 and 11 were rejected under 35 USC § 112, second paragraph, as being indefinite. Claim 5 was rejected as it is dependent from cancelled claim 3. Claim 5 has been amended to change the dependency to claim 1 and it is submitted that this amendment to claim 5 overcomes the basis of rejection under USC § 112 and the Examiner requested to withdraw this basis of rejection with respect to claim 5.

In claim 11 the Examiner indicated that it was unclear what was meant by "formed in a manner of a spacer". Claim 11 has been amended to state that the "at least one raised surface area functions as a spacer". It is submitted that this amendment to claim 11 makes the language of claim 11 clear and the Examiner is requested to withdraw this basis of rejection under 35 USC § 112 with respect to claim 11.

Claim 1 and claims 4, 5, 10, 11, 12 and 18 which all depend from claim 1 were rejected under 35 USC § 102 (b) as being anticipated by the Black ('949) reference.

Claim 1 defines a forced transmitting aggregate having a core plate with a friction lining positioned on the front and back sides of the core plate. The friction lining defines an essentially planar surface with at least one area of the surface of the friction lining having a spring characteristic. The at least one area of the friction lining is raised in comparison to the planar surface and the at least one raised surface area is formed unitarily with the remaining friction lining. The at least one raised area is compressed upon engagement of the friction lining whereby the at

least one raised area is displaced to be in essentially the plane as the essentially planar surface defined by the friction surface. The raised surface area of the friction lining is surrounded by one or more grooves.

The Black reference is directed to a clutch plate having a first layer which consists of friction material, a second layer which consists of a low compression modulus material, a third layer consisting of a high strength core, a fourth layer consisting of a lower compression modulus material and a fifth layer consisting of a friction material. The friction material on each side of the high strength core is embedded into the low compression modulus material positioned on each side of the core. The friction layers on each side of the core in the Black reference are disposed to be in the same plane. The friction layer on each side of the core plate is defined as being a discrete metal particle such as sintered bronze powder and this metallic friction layer is embedded in the coating of low compression modulus material on each side of the core plate. The friction layer of discrete metal particles disclosed in the Black reference does not have a spring characteristic and is not capable of being displaced as defined in applicants' claims. The Black reference requires the use of a separate layer of a low compression modulus material into which the discrete metal particles are positioned. This is different than the unitary friction lining defined in applicants' claims. In addition, the friction layer of discrete metal particles does not have a spring characteristic or at least one raised area in the friction lining as defined by applicants' claims. Accordingly, the Black reference does not disclose or suggest the invention defined by applicants' claims and the Examiner is respectfully requested to withdraw this basis of rejection for the claims.

Claims 13 and 14 were rejected under 35 USC § 102 (b) as being anticipated by the Russell ('424) reference. Claim 13 defines a force transmitting aggregate for a wet disc clutch having a core plate with a front side and a back side. The front and back sides of the core plate are provided with a friction lining and the friction lining has a spring characteristic. The friction lining is characterized

in that it increases in thickness in the radial direction wherein the friction lining is compressed during engagement of the forced transmitting aggregate whereby the friction lining is substantially parallel to the front and back sides of the core plate. Claim 14 depends from claim 13 and adds that the thickness of the friction lining increases conically from the outside towards the inside or increases conically from the inside towards the outside.

The Russell reference is directed to a friction device wherein planar surfaces are utilized to transmit torque from one member to another member. One of the members has a plan surface and the other member has a configured surface made up of a plurality of substantially independent projections having a land that is normal to the axis of the member. Grooves or spacing are provided between the projections on the configured surface of the one member. An important part of this invention is the ratio of total land area to the total depressed or grooved area on the friction member. However, there is nothing in the Russell references that discloses or suggest a friction lining having spring characteristic as defined in applicants' claims. In addition, there is nothing in the Russell references that discloses or suggest that the friction lining having a spring characteristic that increases in thickness in the radial direction and is compressed during engagement of the force transmitting aggregate as defined by applicants' claims. Therefore, it is applicants' position that the Russell reference does not disclose or suggest the invention defined by applicants' claims. In the background of the invention section of this patent there is a mention of resilient friction materials that can be used in forced transmitting devices. However, these materials are described as not being suitable for many force transmitting applications. In addition, there is absolutely no mention of such resilient friction materials having a spring characteristic as defined in applicants' claims or the use of such resilient friction materials in the configured disc configuration that is disclosed in the Russell reference. The disclosure of the Russell reference is to a very specific configuration for a force transmitting disc but there is no mention of the utilization

of a friction material having a sprig characteristic in the disc configuration utilized in this reference. Accordingly, the Russell reference does not support the Examiner's position that this reference discloses the invention defined by applicants' claims. In view of the deficiencies of the Russell reference it is the applicants' position that this reference does not disclose or suggest the invention defined by the claims and the Examiner is requested to withdraw this basis of rejection.

Claims 6 and 7 were rejected under 35 USC § 103 (a) as being unpatentable over the Black ('949) reference in view of the Whitelaw et al. ('710) reference. Claims 6 and 7 are dependent on claim 1 and claim 6 states that the core plate at least in the raised area of the friction lining exhibits a greater thickness than in the remaining areas of the core plate. Claim 7 states that the core plate forms a raised surface area.

The Black reference has been discussed in detail in this amendment and the deficiencies of this reference with regard to claim 1 have been fully explained. The applicants' agree with the Examiner's statement that the Black reference does not show or suggest a core plate that is thicker in the raised area or that the core plate forms the raised area as defined by claims 6 and 7.

The Whitelaw et al. reference in Figs. 7 and 8 shows a core plate that has a corrugated surface. A friction material is positioned on the surfaces of the corrugated core plate. However, the Whitelaw et al. reference does not supply the deficiencies of the previously discussed Black reference and the Whitelaw et al. reference, taken individually or in combination with the Black reference, does not disclose or suggest the invention defined in applicants' claims 6 and 7. Accordingly, applicants' respectfully request that the Examiner withdraw this basis of rejection for the claims.

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In view of the amendment to the claims and the arguments contained herein it is submitted that the claims present in this application patentably distinguish over the prior art relied upon by the Examiner. Accordingly, a favorable action on the claims is respectfully requested.

Respectfully submitted,
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